

REMARKS

This submission is in response to the Official Action dated May 5, 2005. Claim 3 has been canceled without prejudice or disclaimer of the subject matter therein. Claims 1, 2, and 4-10 have been amended. No new matter is added. Claims 1, 2, and 4-10 are presently pending. Claims 1-10 stand rejected. Reconsideration of the above identified application, in view of the above amendments and the following remarks, is respectfully requested.

Claim Rejection - 35 U.S.C. § 102(b)

Claims 1-14 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,983,161 to Lemelson et al. ("Lemelson"). Applicant respectfully traverses this rejection for the reasons set forth below.

Claim 1 has been amended and is directed to a vehicle surroundings monitoring apparatus including means for detecting at least solid object information ahead of an own vehicle; means for recognizing a preceding vehicle traveling in front of the own vehicle based on the solid object information; means for estimating a path that is predicted for the own vehicle to travel on a road ahead of the own vehicle as a traveling path of the own vehicle; means for judging a first relative evacuation possibility for the preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle according to the position of the preceding vehicle and the position of the own vehicle; means for judging a second relative evacuation possibility for the preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle according to information of a solid object other than the preceding vehicle; and means for judging a possibility of relative evacuation for the preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle according to the possibility of relative evacuation by the first evacuation possibility judging means and the possibility of relative evacuation by the second evacuation possibility judging means.

As a result, the invention provides the advantages of being able to detect every behavior of the preceding vehicle, including when the behavior of the preceding vehicle changes, with

quick responsibility and accuracy. As a result, travel control can be executed stably in a manner similar to the actions intended by a driver. See, e.g., page 18, lines 11-22, of the Specification.

Claim 1 has been amended to clarify that the relative evacuation possibility is the possibility for the preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle. Claims 2 and 4-10 have also been amended for clarity.

Lemelson discloses a GPS vehicle collision avoidance warning and control system. Lemelson's system determines a traveling path/region using GPS, camera, and radar and recognizes various solid objects by the use of neural networks and fuzzy logic to control a vehicle and to provide an alarm to warn of collisions and other hazards.

The Examiner contends that Lemelson's "television camera 54" and "radar/lidar 56" serve as the traveling path estimating means of the claimed invention (Office Action, page 2). Lemelson's television camera 54 records images and radar/lidar 56 produces signals used by the image field analyzing computer 50 to "(a) identify objects on the road ahead such as other vehicles, pedestrians, barriers and dividers, turns in the road, signs and symbols, etc, and generate identification codes, and (b) detect distances from such objects by their size (and shape) and provide codes indicating same for use by a decision control computer, 38" (Lemelson, column 20, line 65, to column 21, line 3). The image field analyzing computer 50, through use of the television camera 54, identifies objects on the road and detects distances between the vehicle and the identified objects. Lemelson does not disclose or suggest that a traveling path is predicted by Lemelson's collision avoidance warning and control system. Therefore, the camera 54 does not establish a first judgment region in the road ahead of the own vehicle "based on the traveling path of the own vehicle," as set forth in claim 1.

Lemelson's collision avoidance warning and control system provides warning signals to alert the driver of impending hazards and delivers control signals to operate the vehicle to avoid a hazard or to minimize danger to the vehicle (Lemelson, column 24, lines 37-44).

Signals from automotive control computer 38 are fed to brake servo 58, steering servo 60, accelerator servo 62, head light control 66, horn control 68, and warning light 70 to actuate and control these systems as herein above described using fuzzy logic or other expert system derived control signals (Lemelson, column 20, lines 12-17).

Thus, Lemelson discloses that various control signals may be used to control the brakes, steering, accelerator, headlight, horn, and warning light. However, Lemelson does not disclose or suggest that the control signals are used to estimate a path that is predicted for the own vehicle to take on the road ahead of the own vehicle, as set forth in claim 1.

Furthermore, Lemelson does not disclose or suggest a first, second, or preceding vehicle evacuation possibility judging means which judge a possibility for the preceding vehicle to evacuate from the state of being the preceding vehicle to the own vehicle, as set forth in the claimed invention. The Examiner contends that Lemelson's "television camera 54" serves as the claimed first evacuation possibility judging means (Office Action, page 2), that Lemelson's "radar/lidar 56" serves as the claimed second evacuation possibility judging means (Office Action, page 2), and that Lemelson's "decision computer 38" serves as the claimed preceding vehicle evacuation possibility judging means (Office Action, page 3). As noted above, the television camera 54 records the images and the radar/lidar 56 produces signals used by the image field analyzing computer 50 to identify objects on the road ahead of the vehicle and to detect distances to the objects (Lemelson, column 20, line 65, to column 21, line 3). The decision computer 38 generates control signals that are passed to various warning and vehicle operating devices (Lemelson, column 21, lines 3-14). Lemelson discloses that the computers 38, 50 use control signals so that the own vehicle avoids collisions and hazards. However, Lemelson does not disclose or suggest judging a possibility for the preceding vehicle to evacuate from the state of being the preceding vehicle to the own vehicle, as set forth in claim 1. Therefore, Lemelson does not disclose first, second, or preceding vehicle evacuation possibility judging means, as set forth in claim 1.

Thus, Lemelson does not disclose or suggest all of the features of the invention as set forth in claim 1. Claims 2 and 4-10 depend on claim 1 and are patentable for at least the same

reasons. Claim 3 has been canceled without prejudice or disclaimer of the subject matter therein. Hence, the rejection of claim 3 has been rendered moot.

Based on the foregoing, the rejection of the claims under 35 U.S.C. § 102(b) should be withdrawn, and reconsideration is respectfully requested.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Dated: August 5, 2005

Respectfully submitted,

By Denise L. Poy
Denise L. Poy
Registration No.: 53,480

DARBY & DARBY P.C.
P.O. Box 5257
New York, New York 10150-5257
(212) 527-7700
(212) 753-6237 (Fax)
Attorneys/Agents For Applicants